

**SUPREME COURT OF THE STATE OF NEW YORK
COUNTY OF NEW YORK: COMMERCIAL DIVISION**

WALMART INC. (f/k/a WAL-MART STORES,
INC.,

Plaintiff,

- against -

TESLA ENERGY OPERATIONS, INC. (f/k/a
SOLARCITY CORPORATION),

Defendant.

New York County

Index No.: _____/2019

SUMMONS

TO THE ABOVE NAMED DEFENDANT:

YOU ARE HEREBY SUMMONED to answer the complaint in this action and to serve a copy of your answer upon the undersigned within twenty (20) days after the service of this summons, exclusive of the day of service, or within thirty (30) days after service is complete, if this summons is not personally delivered to you within the State of New York. In case of your failure to answer, judgment will be taken against you by default for the relief demanded in the complaint.

Plaintiff designates New York County as the place of trial. The basis of the venue designated is New York Civil Practice Law and Rules 501 and 503(a). Venue is proper because Defendant agreed to designate New York County as the venue for disputes relating to, arising out of, or in connection with certain of the Solar Power & Services Agreements, Solar Power Lease and License Agreements, and Solar Power and Energy Storage Services Agreements between Plaintiff and Defendant, and because none of the parties reside in the state of New York.

To:

Tesla Energy Operations, Inc.
f/k/a SolarCity Corporation
6900 Dumbarton Circle
Freemont, CA 94555

SolarCity Corporation
3055 Clearview Way
San Mateo, CA 94402

The Norton Law Firm PC
299 Third Street, Suite 106
Oakland, California 94607
Attention: Fred Norton

Dated: New York, New York
August 20, 2019

DAVIS POLK & WARDWELL LLP

By: /s/ James P. Rouhandeh
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COMPLAINT

Plaintiff Walmart Inc. (“Walmart”) (f/k/a Wal-Mart Stores, Inc. (“Wal-Mart Stores”)), by its attorneys Davis Polk & Wardwell LLP, for its complaint against Tesla Energy Operations, Inc. (“Tesla”) (f/k/a SolarCity Corporation (“SolarCity” or “Tesla”)), alleges as follows, based on personal knowledge as to itself and upon information and belief as to all other matters:

NATURE OF THE ACTION

1. This is a breach of contract action arising from years of gross negligence and failure to live up to industry standards by Tesla with respect to solar panels that Tesla designed, installed, and promised to operate and maintain safely on the roofs of hundreds of Walmart stores.

Fires Break Out on Walmart’s Roofs

2. At approximately 4 p.m. on March 7, 2018, a fire broke out on the roof of Walmart’s store in Beavercreek, Ohio. Local news photographs and videos of the store showed a tremendous plume of black smoke emerging from flames as firefighters arrived at the scene. As smoke invaded the store, Walmart employees made an announcement over the store’s public address system and instructed shoppers to evacuate. Customers in nearby shops were also evacuated until firefighters were able to control the blaze. The fire destroyed significant

amounts of store merchandise and required substantial repairs, totaling hundreds of thousands of dollars in out-of-pocket losses. The store remained closed for eight days. Ominously, the fire had occurred near gas lines on the store's roof. By stroke of luck, the gas lines remained intact, and catastrophic damages and injuries were averted.

3. On May 21, 2018, a fire broke out on the roof of another Walmart store, this one located in Denton, Maryland. The fire caused significant damage, including punctures of the membrane of the store's roof. By another stroke of luck, this fire did not progress further and no one was injured.

4. On the opposite side of the country eight days later, fire struck again—this time on the roof of a Walmart store in Indio, California. Local news coverage on May 29, 2018 described a scene of “[t]hick black smoke billow[ing]” from the store's roof, substantial portions of which were “engulfed in flames, which spread into the store.” “[C]ustomers and employees were evacuated to the parking lot.” A firefighter was treated for smoke inhalation but, by yet another stroke of luck, was not grievously injured. This fire resulted in millions of dollars' worth of losses.

5. Why were multiple Walmart stores located all over the country suddenly catching fire? The answer was obvious and startling: the stores all had Tesla solar panels installed by Tesla on their roofs. At each location, the fire had originated in the Tesla solar panels.

6. The stores in Beavercreek, Denton, and Indio were three of more than 240 stores where Walmart had leased or licensed its roof space to Tesla for the installation, operation, and maintenance by Tesla of “photovoltaic” (i.e., solar) systems. Tesla designed these systems and represented them as safe, reliable, and an environmentally conscious way for Walmart to reduce its energy costs. In the contracts between Walmart and Tesla governing the solar systems, Tesla

retained ownership of the solar systems, promised to design, install, inspect, and maintain them non-negligently and in accordance with prudent industry practices, and agreed to handle every aspect of the solar panels' operation on Walmart's roofs in a non-negligent manner. Walmart thus bargained for and obtained—not the right to have a particular system installed on its roofs—but rather the right to enjoy perpetually safe and reliable solar panel systems free of any operation or maintenance responsibilities, which fell entirely to Tesla.

Tesla Agrees to De-Energize the Solar Systems

7. By May 2018, it was clear that Tesla had breached its contractual obligations. To state the obvious, properly designed, installed, inspected, and maintained solar systems do not spontaneously combust, and the occurrence of multiple fires involving Tesla's solar systems is but one unmistakable sign of negligence by Tesla. To this day, Tesla has not provided Walmart with the complete set of final "root cause" analyses needed to identify the precise defects in its systems that caused all of the fires described above. The number of defects, however, is overwhelming and plainly indicative of systemic, widespread failures by Tesla to meet the standard of care, as set forth in the governing contracts, as to the solar systems installed at Walmart's stores.

8. Fearing for the safety of its customers, its employees, and the general public, and wishing to avoid further damages and store closures, Walmart demanded on May 31, 2018 that Tesla "de-energize" (i.e., disconnect) all of the solar panel systems that Tesla had installed at Walmart sites. Tesla complied, conceding that de-energization of all the sites was "prudent" and recognizing that it could provide no assurances that the deficiencies causing its systems to catch fire were confined to particular sites or particular components.

9. Unfortunately, even de-energization was not enough to prevent an additional fire. In November 2018, Walmart discovered that yet another fire had occurred at a Walmart store in Yuba City, California—even though the solar panels at this store had been de-energized since June 2018. Wires on the store’s rooftop were still sparking at the time that Walmart discovered the fire and could have ignited more extensive flames, with potentially devastating consequences. Equally troubling, after Tesla technicians visited the rooftop, one of the technicians failed to close the cover to a combiner box, exposing this important piece of equipment to the elements and thereby creating a fire hazard. Still more troubling, Walmart subsequently learned (independent of Tesla) that a potentially dangerous ground fault alert had occurred at the Yuba City site during the summer of 2018. Tesla either ignored the alert or deliberately failed to disclose it to Walmart. The issues that caused that ground fault alert likely caused or contributed to the subsequent fire in the fall of 2018, revealing Tesla’s utter incompetence or callousness, or both.

10. As of November 2018, no fewer than seven Walmart stores had experienced fires due to Tesla’s solar systems—including the four fires described above and three others that had occurred earlier (one in Long Beach, California, in August 2012; one in Milpitas, California, in 2016; and one in Lakeside, California, in 2017). The Long Beach fire resulted in the evacuation of the store and caused damage to merchandise as water leaked into the store through the roof and skylights. As a result of the fire, Walmart incurred over \$25,000 in repair costs, along with other expenses and damage to merchandise totaling nearly \$65,000. Tesla ultimately agreed to pay for a portion of these losses. The Milpitas fire also caused extensive damage, resulting in over \$500,000 in losses to Walmart, a portion of which Walmart ultimately recovered from

Tesla. Both the Milpitas and Lakeside fires were caused by faulty connectors in Tesla's solar panel systems.

11. In addition to those fires, a Sam's Club store owned by Walmart experienced a power outage in January 2017, forcing the store to close. An electrical contractor called to the site found that the outage was caused by water intrusion into the breaker—which in turn resulted from "a bad installa[tio]n of the conduits" on the Sam's Club's solar panel system, which had recently been installed by Tesla. Walmart experienced over \$55,000 in losses as a result of the outage, for which Tesla eventually compensated Walmart.

Walmart Finds Gross Negligence

12. Beginning after the Beavercreek fire and continuing through December 2018, Walmart's consultants accompanied Tesla personnel on inspections of various solar system sites, including both those that had experienced fires and those that had not. These visits revealed that Tesla had engaged in widespread, systemic negligence and had failed to abide by prudent industry practices in installing, operating, and maintaining its solar systems—conduct that greatly increased the risk of fire at Walmart sites.

13. For example, solar panels across the inspected sites contained numerous hotspots—or localized areas of increased and excessive temperature—as well as yellowed encapsulant and micro-cracks, which are precursors to hotspots. Many of these defects were either visible to the naked eye or readily identifiable with the proper use of standard equipment, indicating either that Tesla had not been inspecting the sites or that its inspection protocols were woefully deficient. Indeed, Walmart quickly discovered that Tesla routinely deployed individuals to inspect the solar systems who lacked basic solar training and knowledge. Tesla's personnel did not know, for example, how to conduct inspections or how to use simple tools,

such as temperature-measuring “guns” used to detect hotspots, and a Tesla employee failed to identify multiple hotspots that Walmart’s consultants observed.

14. Walmart’s inspectors observed negligent and dangerous wire connection practices, which were readily apparent at many of the sites visited and are a critical risk factor in contributing to fires. Tesla personnel had made numerous on-site cable connections using connectors that were not compatible with one another, and they had often failed to “torque” (i.e., tighten) the connectors adequately, due at least in part to their failure to use proper tools for that purpose.

15. Moreover, Tesla’s wire management practices were negligent and inconsistent with prudent industry practices. Loose and hanging wires were present at multiple Walmart locations, resulting in abraded and exposed wires, decreased insulation, and a phenomenon known as arcing that substantially increases the risk of fire by causing electricity to travel through an unintended path. Tesla also failed to “ground” its systems properly, violating basic practices for the installation and operation of electrical systems in a way that increased the risk of electrical fire.

16. Many of the problems stemmed from a rushed, negligent approach to the systems’ installation. On information and belief, Tesla’s predecessor-in-interest—SolarCity—had adopted an ill-considered business model that required it to install solar panel systems haphazardly and as quickly as possible in order to turn a profit, and the contractors and subcontractors who performed the original installation work had not been properly hired, trained, and supervised. For example, the solar panel systems were installed at about 40% of the Walmart sites (approximately 80 to 100 locations) in a one-year period—far exceeding the appropriate rate of installations had adequate quality-control checks or supervision protocols

been in place. On information and belief, when Tesla purchased SolarCity to bail out the flailing company (whose executives included two of Tesla CEO Elon Musk's first cousins), Tesla failed to correct SolarCity's chaotic installation practices or to adopt adequate maintenance protocols, which would have been particularly important in light of the improper installation practices.

17. Tesla also had not kept proper documentation related to the systems. For example, supposedly "as-built" system drawings, which should reflect the actual design, layout, and installation locations of system components as they were actually installed, were anything but "as-built." They often reflected, at best, potential or proposed versions of the system installations, or otherwise erroneous depictions, which deviated substantially from how the systems were actually installed. That meant that system components, including safety switches and other critical portions of the systems, could not be readily located at the sites in the event of a fire or other emergency. The absence of reliable as-built drawings is a basic failing that adversely affects the safety, reliability, and maintenance of the systems. Tesla also lacked maintenance records indicating how (or whether) the solar panels had been inspected and maintained over time.

18. The more Walmart looked into the details, the more deficiencies it identified. Site after site displayed troubling problems that were indicative of widespread negligence and were inconsistent with any suggestion that discrete or isolated problems had caused the seven fires. Based on the fact of the fires, Tesla's failure to provide any final root cause analyses for over a year, and the inspections that Walmart conducted in mid- to late 2018, re-energization of any of the solar systems at that time posed an unacceptable risk to Walmart's employees, its customers, and the general public.

19. Walmart nevertheless worked closely with Tesla to explore a potential path toward re-energization of the systems. Walmart discussed with Tesla in detail the concerns it had about the conditions it discovered at the sites, and Walmart's consultants helped educate Tesla's personnel on how to conduct solar system inspections properly, including the types of conditions that can contribute to the risk of fire, how to use equipment and tools properly to look for and correct such conditions, and how to follow site safety and inspection protocols. Of course, Tesla was contractually obligated to know all of this already and Walmart had no obligation whatsoever in this regard, but Walmart nonetheless opted to work cooperatively with Tesla employees. By January 2019, Tesla purported to have significantly enhanced its inspection protocols and began a renewed series of site inspections, which it claimed would provide sufficient assurances to Walmart to permit re-energization of the systems that passed the inspections.

20. Far from providing assurances that re-energization was safe, Tesla's inspections carried out in 2019 confirmed and amplified Walmart's profound concerns with the solar systems. Tesla's inspection reports identified numerous action items for each of the sites inspected, many of which (according to Tesla's own inspectors) reflected unsafe or potentially unsafe conditions at the inspected sites. For example, across the 29 inspection reports delivered to Walmart as of August 16, 2019, Tesla identified a total of 157 action items requiring repairs or replacement of system components, 48 of which Tesla itself characterized as reflecting conditions that rendered the sites *unsafe or potentially unsafe*. Based on the reports' descriptions of other troubling conditions (that Tesla inexplicably and incorrectly did not designate as posing potential safety concerns), even these numbers understate substantially the safety of the site conditions.

21. Tesla's inspection reports have revealed, among other things:

- improper wire management, including abraded and hanging wires;
- inadequate wire connecting practices and poor grounding;
- inaccurate as-built drawings; and
- solar panel modules that were broken or contained dangerous hotspots.

In other words, Tesla itself has now documented the same—or worse—symptoms of gross negligence at not fewer than 29 sites that Walmart's earlier analysis (and the fact of the seven fires) had already made clear. On information and belief, the actual conditions are worse than as documented by Tesla, based on Tesla's history of deficient and incompetent inspections, including Tesla's reliance on untrained, unqualified, and unsupervised personnel to install and maintain the systems.

22. Tesla has also demonstrated an inability or unwillingness to remediate the dangerous conditions documented in its inspection reports. On information and belief, at least one report stated that Tesla had replaced all field-made connectors at a site even though site conditions indicated otherwise. Connectors also remained under-torqued even after Tesla had conducted a site inspection, and some were so loose that they could be unscrewed by hand. At best, the inspection reports overstate Tesla's efforts to repair solar system defects; at worst, they contain misrepresentations about Tesla's remediation efforts. Either way, the reports are not reliable indicators of site safety.

23. Even assuming that Tesla could remediate every site and achieve the outward appearance of safe solar systems as of a particular point in time—something Tesla has failed to do for more than a year and has shown no capacity to do—that would not address the more fundamental problem that Tesla is incapable of maintaining solar systems in a safe condition and

consistent with the standard of care. Remediating that fundamental deficiency would require, among other things, that Tesla overhaul, expand, and upgrade its internal resources for providing solar system maintenance services (including through proper hiring, training, and supervision of a sufficient number of qualified solar professionals), or that Tesla contract with a qualified third-party provider of those services at Tesla's expense. Tesla has neglected to do either.

24. For all of the foregoing reasons, Tesla has breached all of the solar panel system contracts with Walmart, and operation of the systems at present would create an immediate and imminent risk of injury and harm to Walmart, its customers, its employees, and its property.

* * *

25. Based on Tesla's history of failures with respect to the solar panel systems and its unwillingness and/or inability to correct those failures, Walmart brings suit for breach of 244 of its currently operative solar panel contracts with Tesla. Each of those contracts contains provisions requiring Tesla to install, operate, and maintain the solar panel systems safely, non-negligently, and in accordance with prudent industry practices. Tesla has failed to live up to those obligations and, despite extensive opportunities to cure, has failed to correct its prior breaches (some of which are not curable in any event). In light of Tesla's breaches of the contracts, Walmart now seeks a declaration that Tesla has breached its contractual obligations and recovery of the out-of-pocket costs and other contractual payments that Tesla has refused to pay, along with any other damages and relief that this Court deems just and proper.

PARTIES

26. Plaintiff Walmart is a corporation organized under the laws of Delaware with its principal place of business in Bentonville, Arkansas. Walmart operates over 5,000 retail stores

across the United States that sell food and household products, among other items. Before February 1, 2018, Walmart was known as Wal-Mart Stores, Inc.

27. On information and belief, Defendant Tesla is a corporation organized under the laws of Delaware with its principal place of business in San Mateo, California, and is a wholly owned subsidiary of Tesla, Inc.

JURISDICTION AND VENUE

28. Jurisdiction and venue in this Court are proper under the Solar Power & Services Agreements (“SPSAs”), Solar Power Lease and License Agreements (“SPLLAs”), and Solar Power and Energy Storage Services Agreements (“SPESSAs”) between Walmart (or related entities) and Tesla, and under CPLR 301, 302(a), 501, and 503(a).

29. The parties to the SPSAs, SPLLAs, and SPESSAs either agreed, accepted, and submitted themselves to the jurisdiction of the courts of the State of New York in the city and county of New York or, on information and belief, transacted business within the state and contracted to supply goods or services in the state in such a manner that their acts gave rise to the causes of action enumerated in this complaint. *See* Appendix Z.

30. This Court has jurisdiction over Tesla pursuant to CPLR 302(a) because it transacts business within New York and contracts to supply goods or services in New York (including some of the business and services at issue in this dispute), regularly does business in New York, and derives substantial revenue from interstate and international commerce.

31. Venue in this Court is proper pursuant to CPLR 501 to the extent that the parties to the SPSAs, SPLLAs, and SPESSAs designated New York County as the venue for disputes relating to, arising out of, or in connection with the SPSAs, SPLLAs, and SPESSAs. Venue in this Court is also proper pursuant to CPLR 503(a) because none of the parties reside in the state, permitting Walmart to designate New York County as the venue for this dispute.

SUBSTANTIVE ALLEGATIONS

I. Tesla, Inc. Acquires—and Bails Out—the Struggling SolarCity

32. On information and belief, Tesla, Inc. acquired SolarCity on November 21, 2016. Long before the acquisition, the ties between Tesla, Inc. and SolarCity were close ones: as multiple news outlets have reported, Tesla, Inc.'s CEO Elon Musk developed the idea for a solar-power company in 2004 while on a road trip with his cousin, who co-founded SolarCity and became its Chief Executive Officer. The other co-founder—another of Mr. Musk's first cousins—was named the company's Chief Technology Officer, and Musk was the chairman of SolarCity's board and its largest stockholder.¹

33. On information and belief, SolarCity's business model was to design, install, and lease rooftop solar systems and to sell the energy produced by those solar systems to consumers. Banks and other financial institutions funded the installation process and earned a return over the life of the solar energy contract.² On information and belief, SolarCity's goal was to install as many solar systems as quickly as possible, generating the contracts that provided the foundation for SolarCity's revenue stream. As SolarCity's CEO stated in a conference call in October 2015, "the strategy of the company has all been about growth . . . to achieve scale."³

34. On information and belief, SolarCity's business model was ultimately a bust. Unbeknownst to its customers until public reports later exposed its shoddy practices, SolarCity

¹ Martin LaMonica, *SolarCity CEO Lyndon Rive: From Burning Man to the NASDAQ*, GREENBIZ (Oct. 9, 2013), available at <https://www.greenbiz.com/blog/2013/10/09/solarcity-lyndon-rive-future-distributed-solar>; *Musk Cousin Lyndon Rive, Former SolarCity CEO, to Leave Tesla*, BLOOMBERGNEF (May 16, 2017), available at <https://about.bnef.com/blog/musk-cousin-lyndon-rive-former-solarcity-ceo-to-leave-tesla/>.

² LaMonica, *supra* note 1.

³ Austin Carr, *The Real Story Behind Elon Musk's \$2.6 Billion Acquisition of SolarCity and What It Means for Tesla's Future—Not to Mention the Planet's*, FAST COMPANY (June 7, 2017), available at <https://www.fastcompany.com/40422076/the-real-story-behind-elon-musks-2-6-billion-acquisition-of-solarcity-and-what-it-means-for-teslas-future-not-to-mention-the-planets>.

suffered from “a quality assurance problem.”⁴ Consumers began to complain about “installers failing miserably,” equipment that “just isn’t installed correctly,” and SolarCity’s failure to respond for months to “faulty installation” issues—a problem that “is more than just a few poorly trained technicians” and “le[ft] customer[s] hanging for weeks on end with serious issues.”⁵ On information and belief, as SolarCity’s problems accumulated, its stock plummeted 77% from its summit in February 2014,⁶ and its debt increased thirteen-fold over a three-year period, rising to \$3.3 billion in June 2016.⁷

35. On information and belief, in a heavily criticized deal entered into on August 1, 2016, Tesla, Inc. acquired SolarCity for approximately \$2.6 billion in stock, converting it into its wholly owned subsidiary Tesla, and assumed nearly \$3 billion in SolarCity’s net debt, nearly doubling Tesla, Inc.’s debt load.⁸ A *Wall Street Journal* columnist, referring to the financial difficulties plaguing both companies, wrote, “Tesla latching on to SolarCity is the equivalent of a shipwrecked man clinging to a piece of driftwood grabbing on to another man without one.”⁹

36. That diagnosis turned out to be accurate, if not charitable. Although Tesla, Inc. prided itself on the fact that its “experience in design, engineering, and manufacturing should

⁴ Sarah Hancock, *The 6 Most Common Problems with SolarCity*, BEST COMPANY (June 26, 2019), available at <https://bestcompany.com/news/problems-with-solarcity>.

⁵ *Id.*

⁶ Carr, *supra* note 3.

⁷ Joe Ryan, *Musk Touts SolarCity Deal Synergy, But It May Be About Debt*, BLOOMBERG (June 22, 2016), available at <https://www.bloomberg.com/news/articles/2016-06-22/musk-says-solarcity-deal-about-synergy-but-it-may-be-about-debt>.

⁸ *Tesla’s Trumpeted Solar Shingles Are a Flop*, MIT TECHNOLOGY REVIEW, available at <https://www.technologyreview.com/f/613541/teslas-trumpeted-solar-shingles-are-a-flop/>; Bob Bryan, *Tesla s Buying SolarCity for \$2.6 Billion*, BUSINESS INSIDER (Aug. 1, 2016), available at <https://www.businessinsider.com/tesla-is-buying-solarcity-for-26-billion-2016-8>.

⁹ Spencer Jakab, *A Double Dose of Risk for Tesla in SolarCity Deal*, WALL STREET JOURNAL (Aug. 1, 2016), available at <https://www.wsj.com/articles/a-double-dose-of-risk-for-tesla-in-solarcity-deal-1470067165>.

help continue to advance solar panel technology,”¹⁰ on information and belief, Tesla and Tesla, Inc. proved unable to manage the solar panel systems that they had inherited from SolarCity, to correct the problems that SolarCity’s grow-fast business model had created, and to maintain the already faulty solar systems that Tesla was under a contractual obligation to operate. As elaborated below, Walmart’s experience bears out Tesla, Inc.’s and Tesla’s inability to turn around and bail out the solar panel operations acquired from SolarCity.

II. How Tesla’s Solar Panel Systems Function

37. The purpose of Tesla’s solar panel systems—in technical terms, solar photovoltaic systems—is to convert sunlight into electricity. Solar photovoltaic systems consist of solar modules—i.e., the solar panels visible on the tops of roofs around the world—which consist of a string of photovoltaic solar cells.

38. The process of converting sunlight into electricity is made possible by the fact that the sun generates massive amounts of power and radiates light particles—known as photons—into space in all directions.

39. When the photons strike a solar cell, they excite electrons in the surrounding material, generating both electrical potential (or voltage) and electrical current. This process of generating electrical potential and electrical current is known as the photovoltaic effect.

40. Like water building up behind a dam, voltage can be thought of as electrical pressure—the force that pushes current to flow through an electrical circuit. Electrical current refers to the rate at which electric charges flow.

¹⁰ *Tesla Makes Offer to Acquire SolarCity*, TESLA (June 21, 2016), available at <https://www.tesla.com/blog/tesla-makes-offer-to-acquire-solarcity>.

41. The photovoltaic effect results in a type of current known as direct current (“DC”), which consists of an electric current that flows in only one direction.

42. Because the electrical grid uses alternating current (“AC”) power, and because the solar panel systems are connected to the electrical grid, the systems must convert DC power into AC power. (AC power consists of an electric current that switches direction many times per second.)

43. A device known as an inverter performs this conversion from AC to DC power in solar panel systems. The inverter then sends the AC power to the electrical grid, where it can be metered.

44. Devices known as connectors connect each solar module to the next, forming an electrical “string.” Multiple strings are connected to each other in a combiner box. Connectors must be capable of enduring extreme temperatures and weather conditions, as well as shifts in temperature, and resisting mechanical deterioration or other events that might result in disconnection.

45. At the back of each solar module is a junction box, which holds cables and connectors. Each junction box contains bypass diodes, which prevent current from flowing backwards and bypass currents when a row of solar cells is shaded or obstructed. If a portion of a solar module becomes covered (such that photons no longer reach the module’s surface), bypass diodes—when functioning properly—allow electric current to bypass the blocked parts of the obstructed module or, if necessary, the entire module, which prevents solar cells from overheating and ensures that current can still flow to the end user. When a portion of a module overheats, the area of concentrated temperature increase is known as a hotspot.

III. Walmart Enters into Solar Panel Agreements with Tesla

46. Between February 2010 and February 2016, Walmart and/or related entities entered into at least 244 contracts, known as Solar Power & Services Agreements, Solar Power Lease and License Agreements, or Solar Power and Energy Storage Services Agreements, with Tesla. The SPSAs, SPLLAs, and SPESSAs at issue in this lawsuit are attached as Exhibits 1–244 and are collectively referred to as the “Agreements.” The Agreements require Tesla to install, maintain, and operate solar photovoltaic systems at Walmart stores.

47. [REDACTED]

[REDACTED]

[REDACTED]

48. The Agreements broadly fall into two categories: (1) those that are structured as leases and (2) those that are structured as solar power purchase agreements. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

49. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

50. As owner and operator of the solar photovoltaic systems, Tesla took on specified obligations. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

51. Tesla's covenants and warranties to Walmart under the Agreements generally provide that Tesla will, among other things:

■ [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

█ [REDACTED]

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52. The Agreements also impose obligations on Tesla in the event of system malfunctions or emergencies. [REDACTED]

[REDACTED]

[REDACTED]

53. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

■ [REDACTED]

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56. The Agreements outline certain procedures regarding Tesla's assignment of rights under the Agreements. *See* Appendices AA, BB. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

60. Tesla has breached multiple provisions of the Agreements with respect to *all* of the solar panel system sites that it operates for Walmart—most prominently, Tesla’s promise to construct, install, and maintain the solar panel systems with due care and to handle the solar panel systems in accordance with Prudent Industry Practices. Tesla’s conduct falls far short of satisfying those baseline standards and reflects gross negligence.

61. Between March and May 2018, three Walmart properties in three different states—all with solar panel systems owned, operated, and maintained by Tesla—experienced

fires that originated with Tesla's solar panels, resulting in significant damage and endangering the safety of Walmart customers, employees, and the public.

62. On March 7, 2018, Walmart store 2124 in Beavercreek, Ohio, experienced a roof fire caused by the Tesla-installed solar panel system at that site. Local news coverage depicted a massive plume of black smoke emerging from the Walmart roof and stated that "[a] light smoke haze was reported inside the store" as shoppers were evacuated.¹³ On March 8, 2018, Tesla representatives arrived at the store, without providing Walmart any notice, removed materials from the site, and conducted an investigation of site conditions.

63. The fire apparently originated in a portion of a solar module identified as inverter "D." On information and belief, various installation, inspection, and maintenance problems contributed to the generation and build-up of heat in the inverter, eventually causing the fire that erupted on the roof. One of the problems identified by subsequent inspections was that inverter housing—which had been improperly sealed during installation—permitted water intrusion into the inverter, likely contributing to the fire's ignition. Another problem was that the inverter fuse box contained brass/metal bolts, rather than the types of fuses required by both the manufacturer's installation manual and the National Electrical Code—an industry-wide set of safety standards regarding electric wiring and installation. During the fire, the brass/metal bolts had melted, permitting the fire to spread to other areas of the inverter and the solar panel system. Had the solar panel system been properly installed and maintained, the likelihood that such a fire would have occurred at all, or that it would have spread to the same degree, would have been significantly reduced.

¹³ *Beavercreek Walmart Reopens After Solar Panel Fire* (Mar. 7, 2018), available at <https://www.whio.com/news/local/beavercreek-walmart-reported-fire/2bbIQsfcbIwva2oPxoCVGM/>.

64. The fire caused significant damage to the Walmart store and its merchandise, resulting in the store's closure for eight days. Repair costs totaled approximately \$557,988, and merchandise with a retail value of approximately \$194,478 was destroyed. Walmart also incurred approximately \$50,000 in consultant's and attorneys' fees in connection with investigating the fire. The total amount of out-of-pocket damages incurred as a result of the fire was approximately \$784,293. Tesla paid a portion of those damages, but expenses for consultant's and attorneys' fees remain outstanding.

65. On May 21, 2018, a second Walmart site—store 3843, located in Denton, Maryland—experienced a roof fire that originated in the Tesla-installed solar panel system at that site.

66. Although the cause of the fire is unknown due to Tesla's failure to provide a final root cause analysis, on information and belief, the fire involved the solar panel system's inverter and was likely attributable to one or more of various installation, inspection, and maintenance issues affecting the site.

67. The fire caused significant damage, including punctures of the membrane of the store's roof. Walmart also incurred approximately \$100,000 in consultant's and attorneys' fees in connection with investigating the fire.

68. Tesla did not provide Walmart with notice of this fire until November 2018, well beyond the 24-hour period within which the applicable Agreement required Tesla to notify Walmart of any malfunction or emergency.

69. At or about 10:26 a.m. on May 29, 2018, a third Walmart site—store 2181, located in Indio, California—experienced a roof fire originating within one of the modules of the Tesla-installed system. Walmart employees discovered the fire upon observing smoke drifting

through a skylight and contacted the fire department. Local news coverage described a scene of “[t]hick black smoke billow[ing] from the roof” with the solar panels “engulfed in flames, which spread into the store,” “while customers and employees were evacuated to the parking lot.”¹⁴ A firefighter who responded to the scene was treated for smoke inhalation. Just hours before the fire started, Tesla personnel had been dispatched to the store, likely because Tesla observed irregularities in the solar panel system’s functioning or received an error message related to the system’s inverters. These personnel were evidently unable to correct the issues that led to their site visit, further demonstrating the incompetence and gross negligence of Tesla personnel and their inability to act in conformity with Prudent Industry Practices.

Images of Indio Fire Damage



¹⁴ Lauren Coronado, *Fire at Indio Walmart Store Blamed on Solar Panels: Solar Panel Fires Are “Uncommon,” Experts Say* (May 29, 2018), available at <https://www.kesq.com/news/fires-caused-by-solar-panels-are-uncommon-experts-say/747502440>.



Inspection Team at Site of Indio Fire



Module Junction Box at Indio Site (Likely Source of Fire)

70. Investigation of the Indio fire revealed a number of installation and maintenance issues indicative of pervasive, systemic negligence and conduct that fell far below the standard of Prudent Industry Practices. As described in greater detail below, among the issues identified were module hotspots, improper grounding and wiring methods, improper connector torqueing, and erroneous as-built drawings.

71. The fire caused significant damage to the Walmart store and its merchandise. Repair costs totaled approximately \$3,134,122, while merchandise with a retail value of approximately \$6,048,496 was destroyed. To date, Walmart has incurred approximately \$350,000 in consultant's and attorneys' fees—and expects to incur at least an additional \$100,000 in consultant's and attorneys' fees—in connection with investigating the fire. The total amount of out-of-pocket damages incurred as a result of the fire is anticipated to be approximately \$8,229,516.

72. While the fires at Walmart's Beavercreek, Denton, and Indio stores were particularly notable because they occurred within such a compressed period of time, they were not the first fires that occurred at Walmart stores due to Tesla's negligence. In August 2012, Tesla's solar panels caused an electrical fire on the roof of a Walmart store in Long Beach, California, resulting in the store's evacuation and causing nearly \$90,000 in damages. Faulty connectors caused fires at stores in Milpitas, California, in 2016, resulting in over \$500,000 in damages, and Lakeside, Colorado, in 2017. And in January 2017, Tesla's faulty installation of conduits at a Walmart-owned store caused a power outage that resulted in over \$55,000 in damages for Walmart. Only years later—upon the occurrence of the multiple fires in 2018—did Walmart learn that these incidents were not one-off errors on Tesla's part but were just one symptom of a widespread pattern of negligence and unprofessionalism.

73. Because Tesla has never provided final root cause analyses for five of these six fires, it is possible that other risk factors contributing to the fires remain unknown, and Walmart lacks any basis to conclude that the risks that caused these fires are absent. To the contrary, as Walmart's subsequent analyses and investigations revealed, these fires were plainly not the result of isolated failures, such as discrete equipment malfunctions or other narrow issues that can be isolated to particular sites or addressed through one-off, site-specific remediation. The fires are symptoms of broad, systemic issues arising from Tesla's failure to abide by Prudent Industry Practices and widespread negligent or grossly negligent installation, inspection, operation, and maintenance of all of the solar panel systems, as subsequent analyses and investigations made clear.

V. Tesla De-Energizes the Solar Panels, and Two More Fires Occur

74. Aware of at least two fires that had caused significant damage due to systemic negligence in the installation and maintenance of the solar panel systems, Walmart provided

Tesla with written notice on May 31, 2018, that Tesla had materially breached the parties' Agreements by failing "to properly maintain and inspect the solar energy generation systems." Walmart noted that, "given the fact that the causes of the fires remain under investigation and in light of the inadequacy of Tesla's solar system inspection regimen, Tesla's breach has resulted in the creation of a significant safety hazard . . . , putting Walmart's customers, employees, facilities and merchandise all at risk. Indeed, Walmart emphasizes the extraordinary health and safety concerns that have been created by the Tesla solar generation systems and the resultant need to act immediately." Referring to the implicated Walmart sites as the "Affected Sites," Walmart elaborated:

Since the root causes of these fires [are] unknown, there is no way for Walmart to reasonably conclude that the solar systems at other Affected Sites [do] not pose a hazard with regard to the potential for additional roof fires, especially since Tesla's current inspection procedures appear to have been inadequate to prevent the roof fires at Indio and Beavercreek. Walmart will not jeopardize the health and safety of its employees and customers by assuming the safety of the Tesla systems at the Affected Sites.

Walmart also demanded that Tesla take several "mitigation measures" "until Tesla has demonstrated to Walmart's satisfaction [that] the solar system at each Affected Site no longer represents a potential fire hazard." Among those mitigation measures was immediate de-energization of all solar panel systems and suspension of all solar operations at each of the Affected Sites. Walmart also demanded that Tesla investigate and analyze the two roof fires of which Walmart was aware and that it develop a comprehensive inspection and remediation plan. Walmart's May 31, 2018 notice of breach is attached as Exhibit 245.

75. On June 1, 2018, Tesla responded to Walmart's letter, denying that it had breached any of the Agreements but "agree[ing] it would be *prudent* to de-energize, inspect and

remediate (as may be needed as Tesla and Walmart mutually agree) all of the” sites referenced in Walmart’s letter. (Emphasis added.) Tesla’s June 1, 2018 letter is attached as Exhibit 246.

76. Tesla subsequently de-energized the solar panel systems at all of the Affected Sites, but it has undertaken no meaningful steps to cure the material breaches described in Walmart’s notice of breach. For instance, for over a year, Tesla refused to provide final root cause analyses for any of the fires that occurred at Walmart stores. Tesla finally provided a purported final root cause analysis for the Beavercreek site on August 8, 2019, but the other final root cause analyses remain outstanding. All of the information received by Walmart to date indicates that there are widespread, systemic issues rendering the solar panel systems deficient and dangerous and that Tesla is unable or unwilling to inspect, maintain, and operate the systems in a safe manner consistent with industry standards. Given Tesla’s failure to cure its breaches, Walmart submitted a notice of continued breach to Tesla on September 11, 2018, asking Tesla to provide its complete analysis of the Beavercreek and Indio fires and to explain the remediation and repair efforts that it had undertaken at any sites. Walmart’s September 11, 2018 notice of continued breach is attached as Exhibit 247.

77. Indeed, de-energization has proven insufficient even to prevent fires caused by Tesla’s negligence at de-energized sites. On November 29, 2018, Walmart discovered yet another solar-related fire, this time at Walmart store 1903 in Yuba City, California, originating in a solar panel system that had been de-energized in June 2018 (and had not been thereafter re-energized). The discovery of this fire brought the total number of fires at Walmart stores to seven.

78. A Walmart contractor (not Tesla) called the Yuba City fire to Walmart’s attention after observing signs of a recent fire on the store’s roof. The contractor took photos showing that

wires were still sparking at the time of discovery, indicating that the fire had occurred recently. Photographs also revealed that arcing had affected numerous wires at the Yuba City site over an extended period of time, degrading the wires' insulation and resulting in the incineration of a substantial section of the store's roof. The extent of the damage to the wires indicated that the fire was sufficiently severe that it could have burned the entire store to the ground. Because of Tesla's failure to provide a final root cause analysis, Walmart has no assurance that the next store to experience a Tesla-caused fire will be so fortunate.

Images of Yuba City Roof, Evidencing Fire and Arcing





79. Walmart communicated its findings regarding the Yuba City fire to Tesla, which, despite its duty to monitor and maintain the systems in a safe operating condition, was either unaware of the fire until notified by Walmart or hid its knowledge of the fire from Walmart.

80. Equally or more troubling, on information and belief, Tesla received notification of, and did not disclose to Walmart, a ground fault alert that occurred at the Yuba City site between June 5, 2018, and September 11, 2018—a significant red flag that should have alerted Tesla to the presence of dangerous conditions at the site. Tesla either failed entirely to respond to that alert or sent personnel to the site who were insufficiently trained (or otherwise negligently failed) to identify and remediate the issues that caused the ground fault and likely caused or

contributed to the fire. Tesla did not inform Walmart of the ground fault at any time before November 29, 2018, when Walmart learned of the fire from another contractor.

81. Consistent with its failure to monitor and maintain the site, Tesla failed to inspect the site properly after the fire. For example, instead of closing a combiner box door at the end of the inspection, a Tesla technician left it wide open, exposing it to the elements and resulting in further risks to the Walmart site.

82. Tesla's actions and/or omissions with respect to the Yuba City store fell well below accepted industry standards and are reflective of Tesla's widespread negligence or gross negligence in the operation and maintenance of the solar panel systems.

83. The fire at Walmart's Yuba City store has resulted in substantial damages, including property damages and consultant's and attorneys' fees. Repair costs totaled approximately \$50,000 and, to date, Walmart has incurred approximately \$75,000 in consultant's and attorneys' fees in connection with investigating the fire.

VI. Walmart's Investigations Reveal that Tesla Was Grossly Negligent

84. Following the initial fires, Walmart began reviewing the conditions at the sites where the fires had occurred, as well as other sites. Walmart and its consultants quickly identified a troubling pattern of deficiencies, negligence, and failure to satisfy Prudent Industry Practices. Indeed, the conditions observed at the Indio location—including melted glass, charred debris, and cracked modules—were among the worst observed by Walmart's consultants over the course of their entire careers. Just as concerning, this review confirmed that Tesla's inspection protocol was sub-industry standard and was poorly suited to addressing or remediating the problems that had endangered Walmart employees and customers. The conclusion of these investigations was that Tesla had repeatedly failed to exercise due care, failed to follow standard Prudent Industry Practices, and failed to follow manufacturing

requirements, as mandated by the Agreements, at all of the sites at which its solar panels were installed. Due to the poor condition of the solar panels and Tesla's demonstrated inability to maintain them, their continued operation posed—and to this day poses—an imminent risk of damage or injury to individuals at Walmart sites and to Walmart property.

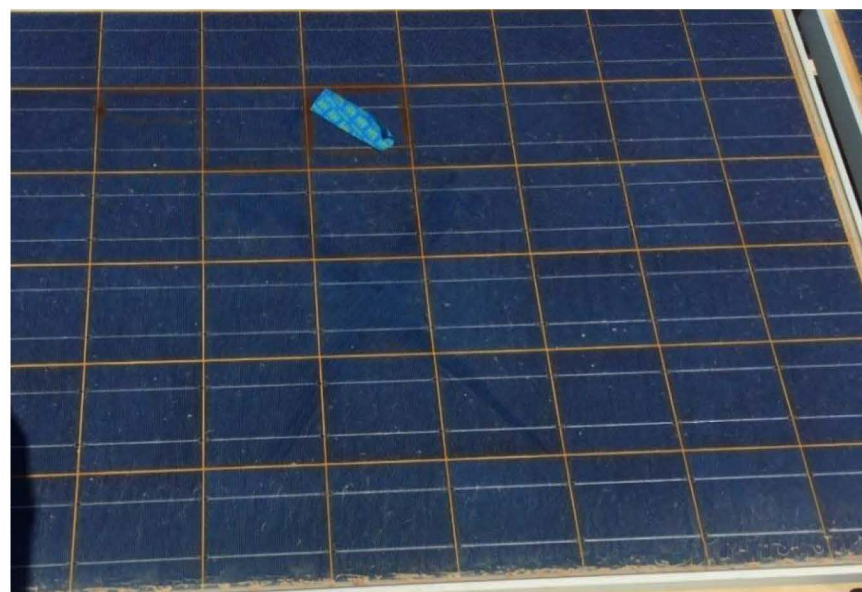
85. The evidence uncovered by Walmart revealed that the solar panel systems had been installed rapidly and that basic quality-control checks had not been undertaken. On information and belief, approximately 80 to 100 installations had occurred within a one-year period, far exceeding a responsible or safe number of installations over that time span. The excessively rapid installation process resulted in a number of quality control oversights that almost certainly would have been corrected had installation and maintenance procedures been followed more rigorously or undertaken more carefully.

86. The evidence from Walmart's inspections also revealed that Tesla had failed properly to hire, train, and supervise its contractors and subcontractors to ensure that they exercised due care—including use of proper methods and tools—in installing solar panel systems.

87. Many of the Tesla solar panels inspected by Walmart were suffering from hotspots, resulting in cracking of the back sheets on solar modules and compromising electrical insulation. This condition compounded the danger and substantially heightened the risk of fire: the hotspots reflected an excessive build-up of heat in the solar modules, which in turn wore down the insulation that was designed to keep electrical currents flowing within their proper paths and to separate electric conductors from their surrounding materials. These conditions can readily lead to electrical fires capable of spreading across an entire rooftop.

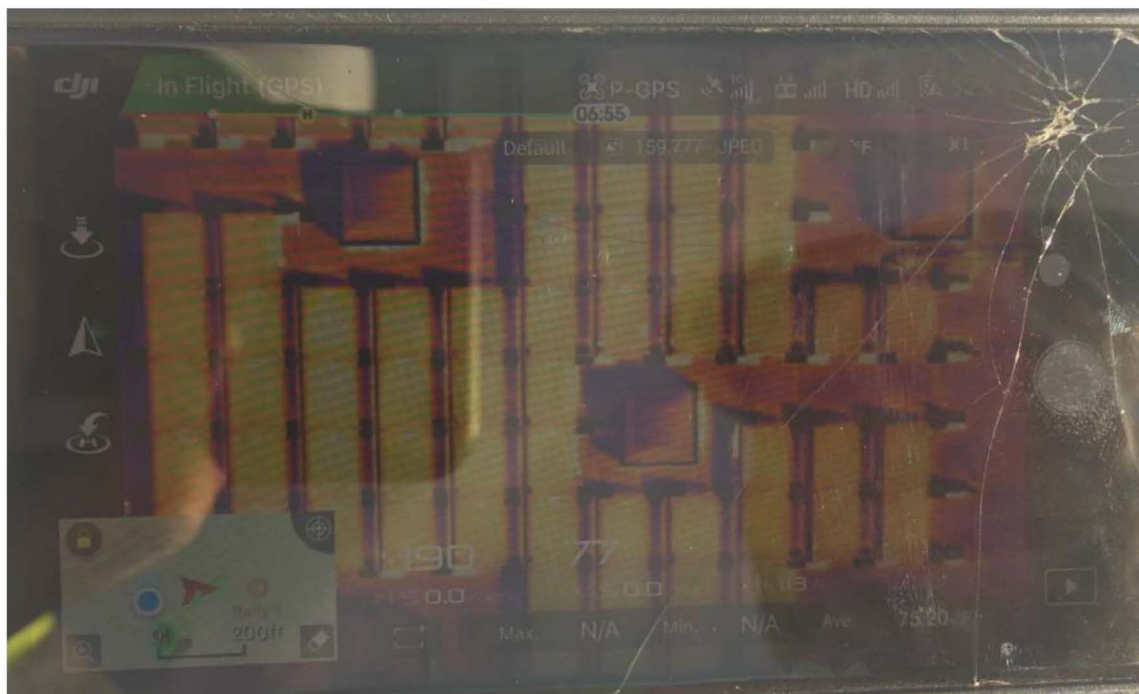
88. Making matters worse, Tesla had flagged or identified hotspots by placing pieces of tape over the affected areas. Because this tape prevented sunlight from reaching the solar panel, it exacerbated the problem by further concentrating heat in certain areas of the solar module—an extremely basic error that a competent inspection team would never have committed.

Images of Tape Used (Improperly) to Flag Hotspots on Walmart Roofs



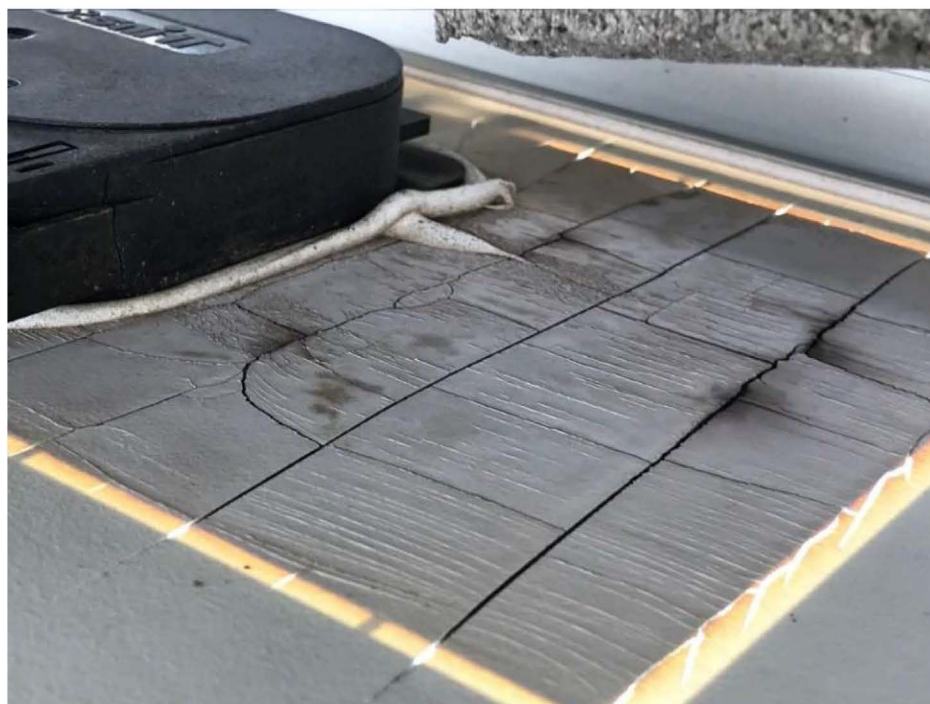
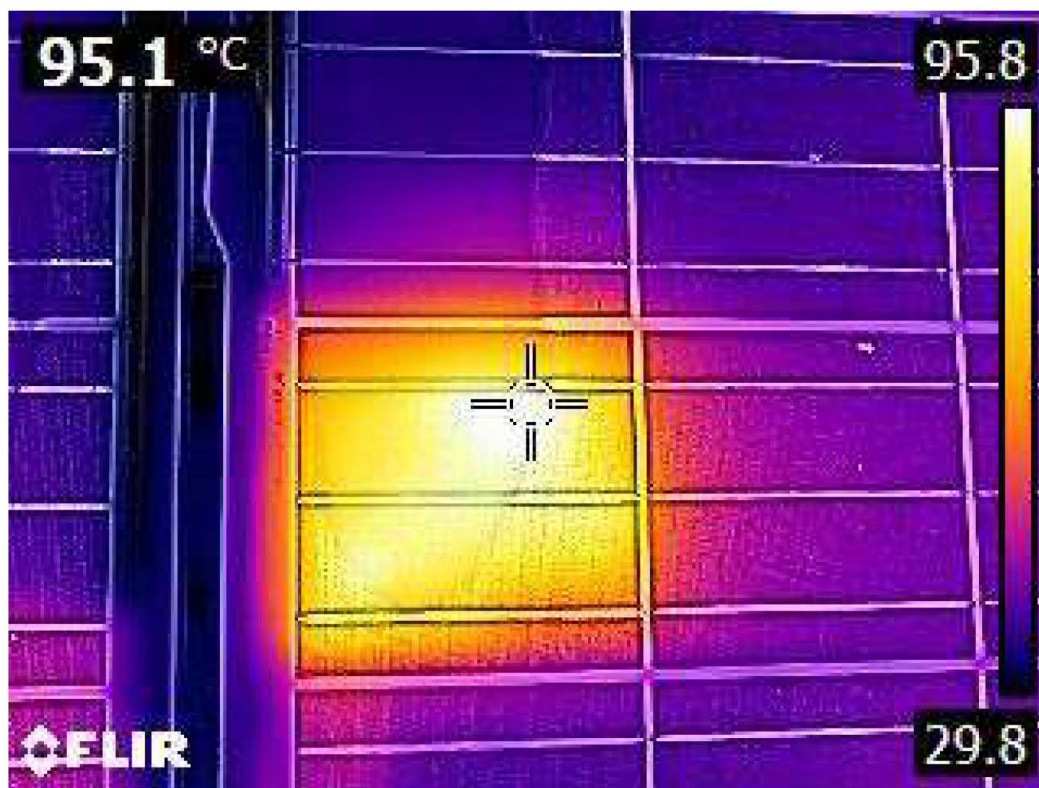
89. Tesla's inspectors also had not implemented proper means of locating and remediating hotspots. They had not adopted uniform standards or directives for identifying hotspots and had not developed criteria to identify when heat differentials between different parts of a module (or different modules) qualified as a hotspot. To locate hotspots, Tesla's inspectors sometimes relied on drones, which generated images of the roofs that lacked sufficient resolution to identify hotspots; as a result, the inspectors missed hotspots that Walmart's consultants found using more reliable methods. On other occasions, Tesla inspectors performed cursory infrared scans from a corner of the roof, but this process did not indicate and would not necessarily have indicated all hotspots across an entire photovoltaic system. Using a thermal gun, a Walmart consultant identified four to six hotspots that Tesla employees had overlooked on just one section of a Walmart roof; one of these hotspots had reached a temperature of over 200 degrees Fahrenheit, as compared to surrounding cells that remained at temperatures of only about 85 degrees Fahrenheit. (The standard temperature differential used to identify a hotspot is a difference of about 60 to 70 degrees Fahrenheit between a solar cell and its surrounding cells. Notably, the solar panels contain plastic components, which begin to degrade at about 160 degrees Fahrenheit.) The hotspots observed during these inspections reflected some of the worst conditions that Walmart's consultants had seen on solar panels over the course of their careers. Some hotspots had resulted in the browning or yellowing of the solar modules and were visible to the naked eye—or should have been, had Tesla's inspectors taken the time to look for them. The conditions were particularly appalling given that hotspots do not develop over the course of one or two days, but rather form over extended periods of time. The prevalence of hotspots on the Tesla systems reflected a long-term pattern of negligence that had gone ignored for years and had not been addressed by proper maintenance procedures.

Image of Drone Scan Showing Inadequate Resolution



Images of Hotspots on Solar Modules and Associated Module Cracking





90. The poor condition of Tesla's solar modules revealed likely explanations for the hotspots that were plaguing Walmart's roofs. Those modules suffered from numerous defects

that are precursors to hotspots, including the yellowing of encapsulant (the adhesive material used to connect components of a solar panel module) and the presence of micro-cracks in the solar modules. Both of those conditions reflect degradation of the solar modules in a manner that might affect bypass diodes and thus contribute to significant heat increases in segments of the solar panel systems.

91. The inspections also disclosed evidence that Tesla had negligently installed and maintained connectors, especially field-made connectors, across the inspected sites. For example, some connectors had been “cross-matched,” meaning that incompatible connectors had been used with one another. When connectors are not matched properly, electric current flowing between the connectors is more likely to encounter resistance—and resistance generates heat, which generates fires. In addition, the Tesla teams consistently failed to torque (or tighten) field-made connectors—another basic requirement of the duty of care, Prudent Industry Practices, and manufacturer specifications. To ensure proper torqueing, inspectors should have used a special tool known as an MC4 torque tool. However, some inspectors were using a plastic MC4 tool, which is insufficient to ensure proper torque. Indeed, a Tesla inspector admitted that Tesla was using a plumbing tool (rather than an electrical tool) to tighten connectors, and the standards that this inspector used to determine when a connector was properly torqued did not meet industry threshold requirements. The lack of torqueing leads to moisture and water intrusion. Once these or other substances enter the space where electricity is intended to flow, they may cause the electricity to deviate from its intended path—and, as excessive current is channeled through certain routes, overheating and, eventually, fire are more likely to occur.

Image of Improperly Threaded Connector
(Threads at Bottom of Image Should Not Be Visible)



92. Poor wire management practices were also evident at multiple Walmart sites. In some cases, sharp points—from, among other items, rough concrete or metal edges—were cutting into or abrading wires. In other cases, temperature changes resulted in the expansion and contraction of wires over time, moving the wires and resulting in their abrasion or exposure. In still other cases, conduits were overstuffed, containing too many wires to be safely used. And wire insulation failures resulted in the exposure of current-carrying electrical conductors to the elements, creating a substantial safety and fire hazard. By degrading the insulation of the solar panels' wiring, these factors increased the risk that an electric current would deviate from its intended path and cause a fire that would spread to surrounding panels. Many of these issues could have been—but were not—addressed through industry standard maintenance procedures, including resealing or reinsulating exposed wires.

Image of Wires Exposed to Sharp Edges



Images of Abraded Wires

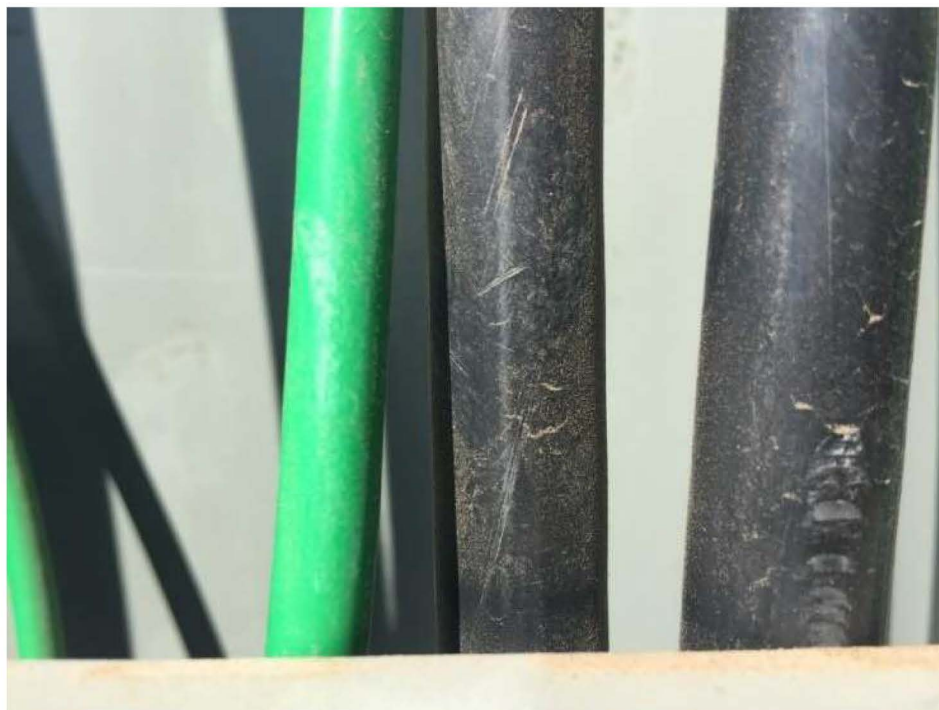




Image of Improper Module Grounding
(Washer Should be Between Lug and Module Frame)



Image of Wire Improperly in Contact with Roof



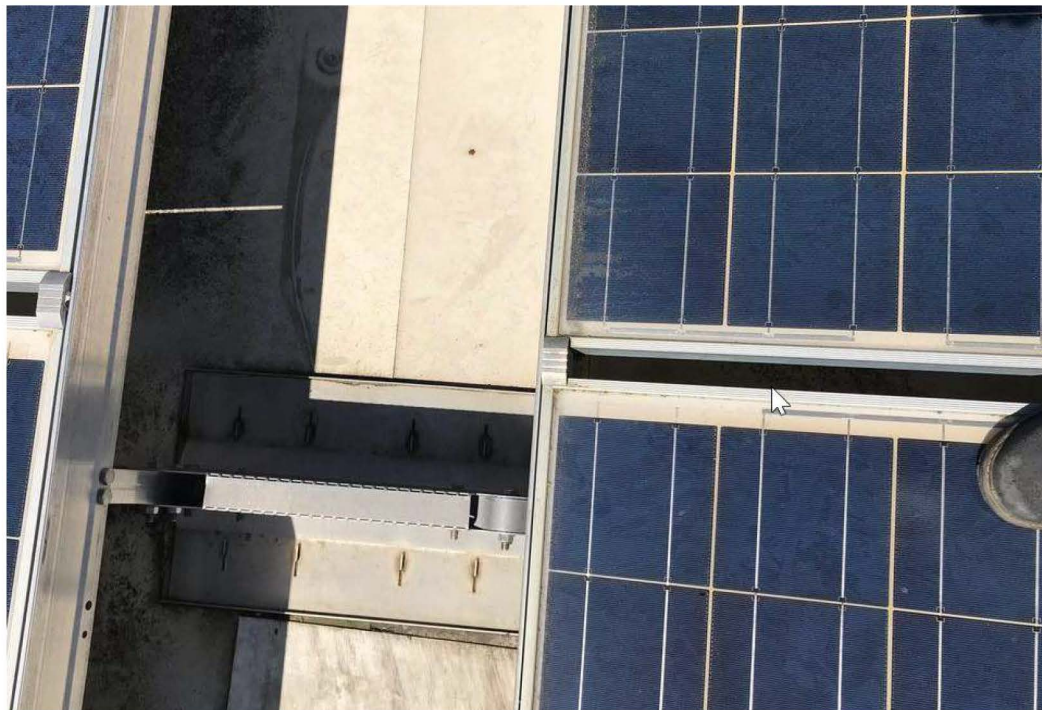
93. Walmart's inspections also disclosed evidence of improper grounding at multiple sites. In the context of electrical systems, "grounding" is critical because it provides a reference (or equilibrium) point that ensures the safe production of electric energy. Electricity generally flows from areas with a high amount of potential energy (typically referred to as a "positive terminal") to areas with a lower amount of potential energy (typically referred to as a "negative terminal")—just as gravity causes water to flow from higher to lower places. "Ground" refers to an electrical reference point for a circuit; proper grounding ensures that electric currents do not jump to or interact with metallic items or other conductors that reside near an electric charge. Improper grounding can cause an electric system to trip (i.e., to stop conducting electricity) or to arc (i.e., to experience the flow of electricity through an unintended path); arcing, in turn, may cause insulation to fail and result in fires.

94. With respect to solar photovoltaic systems installed at Walmart stores, proper grounding means that materials conducting electric charges must connect to a grounding electrode outside of the Walmart store. Upon reviewing Tesla's inspections of Walmart stores, however, it became clear that multiple conductors were not properly grounded according to standard principles of electrical systems as outlined in the National Electrical Code. This fact, in conjunction with Tesla's poor wire management practices, demonstrated that Tesla had run afoul of basic industry conventions in the installation, operation, and maintenance of its solar panel systems—and had done so in a way that exposed Walmart stores, customers, and employees to fires.

95. Tesla's maintenance efforts at Walmart sites fell dramatically short of addressing the problems that Walmart's inspections had uncovered. For instance, industry practice is to conduct insulation resistance testing (also known as Megger testing) at least once per year to ensure that insulation has not degraded to a dangerous degree. But Tesla had never conducted insulation resistance testing on certain conductors, plainly violating these standards.

96. Tesla inspection personnel frequently missed or improperly identified obvious and visible risks with the solar panel systems and were often negligent in performing inspections. Most glaringly, Tesla inspection personnel violated elementary safety standards by negligently stepping on modules (potentially contributing to micro-cracks), using the wrong equipment for basic tasks, and—in one instance—leaving a combiner box enclosure open and exposed to the elements after an inspection. Tesla also relied on drone fly-overs and other shortcuts when inspecting sites, rather than sending qualified and properly trained solar inspectors to physically inspect solar panel systems with appropriate equipment—the established industry method for conducting thorough inspections.

Image of Tesla Inspector Stepping on Solar Modules
(Inspector's Foot Visible in Bottom Right of Image)



97. Tesla's failure to document the conditions at numerous sites made the inspection process much more difficult than it should have been. When an engineering team designs a solar panel system or outlines the processes for installing it, the team maps out a blueprint. During the installation process, deviations from that blueprint inevitably occur. As a result, when construction concludes, the National Electrical Code indicates that the installation team must prepare what are known as "as-built" drawings, which are supposed to accurately reflect the locations and characteristics of the solar panel system and its components, exactly as they were installed at the site in question. Accurate as-built drawings are critical to proper inspection, maintenance, and operation, in no small part because technicians, firefighters, and other individuals interacting with the solar panels must be able to rely on the drawings to locate specific equipment, safety switches, and other components. However, discrepancies existed

between the solar panel systems installed at various sites and the so-called “as-built” drawings that were supposed to accurately depict and reflect those solar panel systems.

98. Tesla’s poor record-keeping and documentation efforts extended beyond the purported “as-built” drawings. Tesla’s records were unusable to non-Tesla employees who tried to review them—and even to Tesla’s employees themselves: one of Tesla’s own field support managers admitted that he could not understand Tesla’s reports. Despite multiple requests for records regarding installation dates and subcontractors who worked on the solar photovoltaic systems, Tesla failed to provide the requested records. These documents would have proven critical to Walmart’s assessment of proper remediation methods, but Walmart and its consultants have yet to see them. If these records existed, they would undoubtedly have confirmed the widespread deficiencies in Tesla’s performance that Walmart’s inspections already revealed.

99. The mountain of disturbing evidence collected during the inspections of solar panel sites made clear that system-wide risks affected Tesla’s solar panel systems, all of which helped to explain why the solar panels were causing fires on Walmart’s roofs. The installation problems with Tesla’s solar panels spanned multiple locations, demonstrating that systemic Tesla malfeasance was the cause of the solar panel systems’ problems. Moreover, on information and belief, Tesla itself handled all operational and maintenance work in-house, demonstrating that the widespread failures were, once again, attributable to Tesla.

100. The inspections made clear that: (1) installation, operation, maintenance, and inspection issues had caused the solar panel fires; (2) these issues resulted from grossly negligent conduct on Tesla’s part that did not accord with Prudent Industry Practices; (3) Tesla failed to live up to standards of reasonable care and to industry standards with respect to solar panel installation, operation, maintenance, and inspection practices; and (4) the fires could have been

prevented had Tesla abided by its obligations under the contracts. Tesla has never provided Walmart with any information indicating an alternative cause for any of the fires that occurred at Walmart's stores.

101. The inspections also made crystal clear that the fires had not been caused by one-off problems at specified Walmart sites. They resulted from system-wide deficiencies related to the installation, operation, maintenance, and inspection procedures that Tesla had employed, and the fires could have been prevented had Tesla acted consistent with the standard of care and adopted the industry-standard procedures that it had contractually agreed to employ.

102. No later than early 2019, by the time Walmart's consultants had completed an initial round of inspections, they concluded that Walmart stores with Tesla solar panels were unsafe for shoppers and employees. The consultants themselves would not have wanted to step foot inside the stores or allowed their families to do so if the sites were energized. In light of the extensive problems with Tesla's solar panel systems and its negligent maintenance and inspection procedures, re-energizing the solar panel systems at any Walmart locations would have posed—and, to this day, continues to pose—an imminent risk of harm to Walmart, its customers, its employees, and its property.

VII. Tesla's Inspections Confirm Walmart's Conclusions

103. The results of Tesla's own inspections, conducted by its own personnel, confirm Walmart's findings.

104. Despite the severity of the safety threat posed by Tesla's solar panels and the widespread nature of the deficiencies, Tesla has not reacted with the urgency that one would expect from a company that had installed solar panels that were catching on fire. Far from it: Tesla's cavalier responses have only confirmed Walmart's worries that its contractual

counterparty is incapable of providing maintenance and inspection services sufficient to ensure the safety of Walmart's customers, employees, and property.

105. Despite Walmart's repeated requests over a 14-month period, Tesla refused to provide a single final root cause analysis until August 8, 2019, when it produced a purported final root cause analysis for the Beavercreek site. Tesla has yet to produce final root cause analyses for any of the other sites that experienced fires.

106. Tesla's conduct in investigating the Walmart sites and developing a remediation protocol has done nothing to allay Walmart's concerns. In fact, it has enhanced those concerns. Tesla's initial remediation protocol, offered in response to Walmart's May 31, 2018, request for such a protocol, fell far below industry standards and was unacceptable to address the problems that had caused fires at Walmart locations. One of Tesla's own employees admitted that Tesla's inspection protocol was inadequate, and Tesla team members conceded that they were neither trained in nor capable of performing the inspections. In one instance, they were unable to locate a basic component of a solar panel system. Nonetheless, Tesla ignored these deficiencies, plowing ahead with a series of cursory and improper inspections. Among other flaws, these inspections suffered due to the absence of accurate as-built drawings, which made it nearly impossible to identify the precise locations that required inspection or that might be prone to problems.

107. When Walmart demanded that Tesla revise its inspection procedures, the new protocols continued to suffer from deficiencies. For instance, Tesla used infrared imaging to identify hotspots. But, using a handheld device, a Walmart consultant identified hotspots on the roof of a Walmart site and compared the hotspots that he had identified to those identified by the Tesla subcontractor. The subcontractor had missed a number of hotspots.

108. As Tesla began preparing inspection reports for Walmart locations, the reports confirmed the presence of widespread, systemic flaws in the solar panel systems. To date, Tesla has inspected and provided Walmart with inspection reports for 29 sites; those reports have identified a total of at least 157 action items requiring repairs or replacement of solar panel system components—48 of which Tesla characterized as reaching “level 2” or “level 3” severity, reflecting conditions that Tesla believed rendered the affected sites unsafe or potentially unsafe. Those figures understate the severity of the problems that Tesla’s own inspectors have uncovered, because numerous deficiencies that Tesla classified as “level 1” raise serious safety concerns, and other issues were wrongly or erroneously omitted from Tesla’s lists of action items. For example, many of the reports did not include photos of damaged or defective modules, making it impossible to evaluate the severity of any problems. The reports were also difficult to evaluate given the references to extremely indeterminate action items (e.g., “DC Power Supply failure in Solectria inverter”) and vagueness in explaining how remediation plans were (or would be) implemented. These problems were compounded by inconsistencies in the methods and techniques used to inspect different sites—once again making it nearly impossible for Walmart to determine whether Tesla was fixing any of the problems that had contributed to the fires.

109. Recognizing that Tesla’s inspection reports omit or understate the deficiencies of the solar panel systems, those reports reveal, at a minimum, that:

- at least 28 of the 29 inspected sites presented issues with wire management, ranging from the presence of hanging or unordered wires, wires that were exposed to sharp edges, the presence of unnecessary jumpers, problems

relating to conduits, and instances in which wires with degraded insulation were found lying directly in puddles of water;

- all 29 of the inspected sites had incorrect as-built or site drawings that misidentified the locations of various solar panel system components and misidentified the type and number of sub-parts within those components;
- at least 25 of the 29 inspected sites had solar panel modules (which came from several different manufacturers) that were broken, damaged, or presented hot spots, causing Tesla's own technicians to recommend replacing those modules;
- more than half of the 29 inspected sites had issues with connectors—due to overheating, mismatching of connectors, use of non-MC4 connectors in violation of manufacturer specifications, improperly sized connectors, improper crimps and damaged connector pins, overheated connections, rust, or generally poor installation work;
- all 29 of the inspected sites had missing or incorrect slipsheets, placards, or labels for certain components; and
- almost two-thirds of the 29 inspected sites presented issues with improper system grounding.

110. Based on these findings, the reports reveal numerous safety hazards reflecting systemic breaches of the Agreements—all of which were caused initially by Tesla's faulty installation practices or were allowed to occur over time by Tesla through faulty operation, maintenance, and inspection processes.

111. Tesla has also proven that, consistent with its failure to maintain the systems adequately over a multi-year period, it is incapable of addressing and remediating the problems identified in its inspection reports. On information and belief, Tesla did not perform all of the corrective measures that it claimed to have performed in those inspection reports, including replacement of all field-made connectors at certain sites. In addition, even after Tesla's purported inspection and repair efforts, many connectors remained under-torqued, and some could be unscrewed with one's bare hands. Tesla's inspections, much like its installation and maintenance practices generally, were conducted carelessly and superficially and were inadequate to ensure site safety; similarly, its inspection reports—much like its record-keeping generally—contain inaccuracies that render the reports wholly unreliable.

112. Tesla's recalcitrance extends beyond its unwillingness to adopt appropriate safety procedures and maintenance protocols. Despite months of back-and-forth with Walmart, Tesla has yet to pay one cent of the out-of-pocket damages and consulting/inspection fees that Walmart incurred as a result of the fires at Denton, Indio, and Yuba City, as well as consultant and attorneys' fees related to the Beavercreek fire. Tesla has been on notice of Walmart's claims since January 2019 at the latest and, as to the Beavercreek, Denton, and Yuba City fires, has never disputed Walmart's documentation of its damages. Nonetheless, Tesla did not compensate Walmart for any losses from Beavercreek until August 7, 2019—one day before the cure period was set to expire—and has not compensated Walmart for any losses related to the fires at the other three sites. Nor has Walmart received any indication that Tesla named Walmart as an additional insured on Tesla's insurance policy, further jeopardizing Walmart's ability to obtain payment.

113. Moreover, in the course of discussions between Walmart and Tesla, it also became clear that Tesla had assigned each of the Agreements to third parties without providing notice to Walmart of any of the assignments, as was required under the Agreements. *See* Appendix AA. Although Walmart has asked for information about the Tesla investors who purportedly have interests in the Agreements through these assignments (as well as for other information about the structure of the assignments), Tesla has declined to provide it. Tesla's invalid assignments have impeded Tesla's compliance with the terms of the contract. For example, at times Tesla has justified its refusal to take certain steps by claiming that it needs to gain the consent of its assignees—a needless and illegitimate roadblock that was caused entirely by Tesla's invalid assignments.

VIII. Walmart (Re-)Notifies Tesla of Its Breaches

114. By July 2019, over a year after Walmart learned of the fires that were erupting on the roofs of its stores, it was startlingly clear that Tesla had no intention of correcting its past mistakes or doing what is needed to ensure safe conditions for Walmart shoppers and employees. On July 9, 2019, pursuant to the rights granted to Walmart under the Agreements, Walmart notified Tesla for a second time of its numerous material breaches of the Agreements, providing a detailed explanation of the facts that had led Walmart to conclude that these breaches had occurred and remained uncorrected. Walmart's notice of breach is attached as Exhibit 248.

115. Walmart gave Tesla one final 30-day period to cure its breaches (to the extent cure was possible). Walmart requested that Tesla:

- provide root cause analyses to Walmart for each of the Beavercreek, Denton, Indio, and Yuba City fires;

- demonstrate to Walmart's satisfaction that, notwithstanding years of negligent inspection, maintenance, and operation, Tesla was capable of providing those services in a prudent, non-negligent manner going forward—including a demonstration to Walmart's satisfaction that Tesla had fundamentally overhauled, expanded, and upgraded its internal resources for providing these services (through proper hiring, training, and supervision of a sufficient number of qualified solar professionals) or that Tesla was prepared to contract with a qualified third-party provider of those services at Tesla's expense;
- formally adopt a substantially enhanced inspection protocol satisfactory to Walmart, which would take into account the conclusions of the root cause analyses for the Beavercreek, Denton, Indio, and Yuba City fires;
- provide written certification to Walmart that (i) none of the root causes of the Beavercreek, Denton, Indio, and/or Yuba City fires were present at any of the Walmart stores with Tesla solar panels, (ii) a thorough inspection of all potential sources of human error and equipment defects following the agreed enhanced inspection protocol had been conducted for all Walmart stores with Tesla solar panels; and (iii) all of the stores had been fully remediated and did not pose a risk of a future fire;
- pay Walmart the Performance Guarantee Payments owed to Walmart under the Agreements since de-energization; and
- fully compensate Walmart for its out-of-pocket damages, including consultant and attorneys' fees, resulting from each of the Beavercreek, Denton, Indio, and Yuba City fires.

116. On July 29, 2019, Tesla responded to Walmart's notice of breach with a series of unsubstantiated allegations. Tesla's response to Walmart's notice of breach is attached as Exhibit 249.

117. Describing the Beavercreek, Denton, Indio, and Yuba City fires as "regrettable," Tesla expressly noted that it was "not disput[ing] that some of the[] issues" identified in Walmart's notice of breach "did exist, to varying degrees, at some Walmart rooftop sites." Tesla also admitted that its site inspections to date "have identified areas for improvement and opportunities for error correction," and it conceded that "more testing can and may be done" to identify the causes of the fires at Walmart stores. Despite Tesla's assertion that it was "willing to satisfy most of the requirements that Walmart has given," Tesla's explanation of how it intended to do so fell far short of curing its breaches. In particular, although Walmart requested that Tesla adopt an enhanced inspection protocol that accounted for the findings of any root cause analysis at the Beavercreek, Denton, Indio, and Yuba City sites, Tesla insisted that its current inspection protocol was adequate—even though it has never provided Walmart with the root cause analyses for the Denton, Indio, and Yuba City sites that must inform development of that protocol. Similarly, in the absence of any formal commitment or concrete steps, Tesla's boilerplate assertions that it intends to improve its operational and maintenance program going forward is unsatisfactory to Walmart, which has heard the same assertions from Tesla many times before but has never seen them successfully implemented.

118. Walmart responded to Tesla's letter on August 9, 2019, correcting its factual inaccuracies and confirming that Tesla had made no meaningful progress (and had evinced no intent) to cure its breaches. Walmart's response is attached as Exhibit 250.

119. Tesla submitted an additional response on August 11, 2019, which still failed to dispute the substance of Walmart's findings with respect to Tesla's negligence. Tesla's August 11, 2019 correspondence is attached as Exhibit 251.

120. Walmart replied on August 14, 2019, correcting some of the remaining inaccuracies in Tesla's understanding of key events. Walmart's August 14, 2019 correspondence is attached as Exhibit 252.

121. The 30-day cure period expired on August 8, 2019. As of that date, Tesla had not made any reasonable steps toward curing its breaches, ensuring that Walmart stores remained safe from fires, assuring Walmart that it could adequately maintain the solar panel systems going forward, or formally adopting an enhanced inspection and maintenance protocol. As a courtesy, Walmart agreed to extend the cure period until the close of business on August 15, 2019, but Tesla still had not taken any reasonable steps toward curing its breaches as of that date.

122. Given Tesla's extensive delays and the egregiousness of its past breaches, Walmart now brings suit for recovery of the damages caused by those breaches and for a declaration of its rights against Tesla.

**COUNTS 1-244
AGAINST TESLA
(Breach of Contract)**

123. Walmart repeats and realleges the allegations contained in paragraphs 1 through 122 above.

124. Walmart (f/k/a Wal-Mart Stores) and Tesla (f/k/a SolarCity) are parties to each of the Agreements, which are valid and enforceable contracts setting forth the rights and responsibilities of Walmart and Tesla.

125. Walmart has performed all of its obligations under the Agreements.

126. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

127. Tesla's failure to detect hotspots, correct panel defects, engage in proper installation and maintenance techniques, adopt proper wire management practices, and otherwise abide by safety precautions necessary to prevent fires at and ensure the safety of Walmart stores, among other misconduct, breached the Agreements in numerous ways.

- a. Tesla failed to pay the out-of-pocket costs and the consulting fees that are due to Walmart for damage caused by the fires at the Indio, Denton, and Yuba City locations and failed to pay the consulting fees that are due to Walmart for damage caused by the fire at the Beavercreek location. *See* Appendix CC.
- b. Tesla failed to abide by Prudent Industry Practices in operating and maintaining the solar panel systems, resulting in preventable fires that occurred at no fewer than seven Walmart locations. *See* Appendix O.
- c. Tesla failed to install and maintain the solar panel systems in accordance with standards of due care. *See id.*

- d. Tesla failed to ensure that the solar panel systems were capable of operating in accordance with required specifications and the manufacturer's warranties. *See* Appendix J.
- e. Tesla failed to maintain the systems in accordance with Prudent Industry Practices, manufacturer requirements, manufacturer warranty guidelines, and applicable laws. *See id.*
- f. Tesla failed to perform all maintenance and routine or emergency repairs that were required under the Agreements. *See* Appendix K.
- g. Tesla failed to maintain, inspect, service, repair, overhaul, and test the solar panel systems based on maintenance manuals furnished with the systems, mandatory or otherwise required service bulletins issued by or through the manufacturer and/or the manufacturer of any part of the systems, and all applicable directives used by local electric utilities or comparable regulatory agencies. *See id.*
- h. Tesla failed to undertake and complete all maintenance procedures required by the Agreements in accordance with the manufacturer's recommended procedures, and by properly trained, licensed, and certified maintenance sources and maintenance personnel, so as to maintain the systems and their components in as good operating condition as when delivered to Walmart, ordinary wear and tear excepted. *See id.*
- i. Tesla failed to use and operate the systems in compliance with statutes, laws, ordinances, regulations, standards, directives, certificates, licenses, registration permits, or authorizations issued by a relevant governmental

authority or local electric utility, and in a manner that did not modify or impair any existing warranties on the systems or their parts. *See* Appendix M.

- j. Tesla failed to take all necessary and reasonable safety precautions with respect to installation work and system operations to ensure compliance with laws and Prudent Industry Practices pertaining to the health and safety of persons and real and personal property. *See* Appendix N.
- k. Tesla failed to notify Walmart of at least one fire within 24 hours of the fire's occurrence, as required by the applicable Agreement. *See* Appendix C.
- l. Tesla failed to provide Walmart with the notice required under the Agreements in advance of assigning the Agreements to third parties. *See* Appendix AA.

128. As a direct and proximate result of Tesla's breaches, Walmart has suffered significant damages and other harm, including but not limited to the out-of-pocket damages, consulting and attorneys' fees, and Performance Guarantee Payments that are owed to it, and is therefore entitled to relief.

**COUNTS 245–488
AGAINST TESLA
(Declaratory Judgment)**

129. Walmart repeats and realleges the allegations contained in paragraphs 1 through 128 above.

130. A bona fide, justiciable controversy exists between the parties as to their respective rights under the Agreements. In particular, there is a bona fide, justiciable, present,

definite, substantial, and sufficiently matured controversy as to whether Tesla has breached its contractual obligations and whether its default creates an imminent risk of damage or injury to any person or property or risks a violation of applicable law, such that Walmart can demand removal of all or a portion of the solar panel systems under § 11.1(c) of the Agreements.

131. This controversy is ripe for judicial determination so that the parties can determine their respective rights under § 11.1(c) of the Agreements.

**COUNTS 489–492
AGAINST TESLA
(Negligence)**

132. Walmart repeats and realleges the allegations contained in paragraphs 1 through 131 above.

133. Tesla owed Walmart a duty of care as a result of Tesla's provision of professional services to Walmart through the design, construction, installation, testing, maintenance, and operation of solar panel systems at Walmart stores (and, in some cases, as a result of Tesla's status as lessor of the solar panel systems to Walmart). Tesla's safe and satisfactory provision of these services is a matter of significant public interest.

134. Tesla breached its duty of care by failing to design, construct, install, test, maintain, and operate its solar panel systems in a non-negligent manner at the Walmart stores in Beavercreek, Denton, Indio, and Yuba City.

- a. With respect to the Beavercreek store, Tesla's negligent installation and maintenance resulted in improper sealing of the inverter housing, which permitted water intrusion into the inverter and likely contributed to the fire's ignition. Tesla's negligent installation and maintenance also

resulted in the use of brass/metal bolts in the inverter fuse box; those bolts melted during the fire, permitting the fire to spread.

- b. With respect to the Denton store, Tesla's negligent installation, inspection, and maintenance led to problems with the solar panel system's inverter, again contributing to the fire that occurred on the store's roof.
- c. With respect to the Indio store, Tesla personnel were dispatched to the store just hours before the fire occurred but negligently failed to detect and correct any problems with the solar panel system. Tesla's negligent installation, inspection, and maintenance procedures resulted in module hotspots, improper grounding, poor wire management, improper connector torqueing, and erroneous as-built drawings, all of which contributed to the fire's ignition or spreading (and made it more difficult to put out the fire once detected).
- d. With respect to the Yuba City store, Tesla's negligent installation, inspection, and maintenance procedures resulted in arcing and damage to wires at the store, creating dangerous conditions that could easily have caused Walmart's entire store to burn to the ground.

135. As a direct and proximate result of Tesla's negligence, Walmart has suffered significant damages and other harm, including but not limited to the out-of-pocket damages and consulting and attorneys' fees that it incurred as a result of the fires at its Denton, Indio, and Yuba City sites, as well as consultants' fees incurred as a result of the Beavercreek fire.

PRAYER FOR RELIEF

WHEREFORE, Walmart respectfully requests that this Court enter a judgment:

- A. Declaring that Tesla has breached all of the Agreements;
- B. Enjoining Tesla to require it to remove the solar panel systems from all Walmart locations;
- C. Awarding Walmart damages in an amount reflecting the outstanding value of out-of-pocket costs and consulting fees in connection with all the fires caused by Tesla's solar panel systems, including the fires at its Beavercreek, Indio, Denton, and Yuba City locations, as well as damages reflecting the value of any contractual payments owed to Walmart under the Agreements;
- D. Awarding Walmart such other damages to which it is entitled, in an amount to be determined at trial;
- E. Awarding Walmart all costs and disbursements, including reasonable attorneys' fees;
- F. Awarding pre-judgment and post-judgment interest to the maximum extent provided by law; and
- G. Granting such other and further relief as the Court may deem just and proper.

Dated: New York, New York
August 20, 2019

Respectfully submitted,

DAVIS POLK & WARDWELL LLP

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Attorneys for Plaintiff

RELEVANT CONTRACT PROVISIONS¹

APPENDIX A:

[REDACTED]

	Exhibit No.	[REDACTED]
1	1-162 231-244	[REDACTED] [REDACTED] [REDACTED] [REDACTED]
2	163-230	[REDACTED] [REDACTED] [REDACTED] [REDACTED]

¹ Unless otherwise noted, the contract provisions listed in these appendices are excerpted from the Solar Power & Services Agreements (“SPSAs”), Solar Power Lease & License Agreements (“SPLAs”), and Solar Power & Energy Storage Services Agreements (“SPESAs”) between Walmart Inc. (f/k/a Wal-Mart Stores Inc.) and Tesla Energy Operations, Inc. (f/k/a SolarCity Corporation), which are referred to as the “Agreements” in the Complaint and are attached as **Exhibits 1-242**. For each Walmart site at which Tesla installed solar panels, the parties entered into: (i) a core agreement (either an SPSA, SPLA, or SPESA) and (ii) a varying number of supplemental agreements and amendments, not all of which are referenced in these appendices. Where an agreement other than the core agreement is referenced, the title of that agreement is denoted in the caption at the top of the appendix. The text of the relevant contract provisions is copied verbatim in these appendices, including any typographical or grammatical errors (without the use of “[sic]”).

APPENDIX B:

[REDACTED]

	Exhibit No.	[REDACTED]
1	1-36 243	[REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]
2	37-55	[REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]
3	56-141 151-159 210-242 244	[REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]
4	142-150 160-162	[REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]

APPENDIX B (continued):

[REDACTED]

	Exhibit No.	[REDACTED]
5	163-209	[REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]

APPENDIX C:

[REDACTED]

	Exhibit No.	[REDACTED]
1	1-36 243	[REDACTED]
2	37-55	[REDACTED]
3	56-141 151-159 163-242 244	[REDACTED]

APPENDIX C (continued):

[REDACTED]

	Exhibit No.	[REDACTED]
4	142-150 160-162	[REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]

APPENDIX D:

[REDACTED]

	Exhibit No.	[REDACTED]
1	1-36 243	[REDACTED]
2	37-55	[REDACTED]

APPENDIX D (continued):

[REDACTED]

	Exhibit No.	[REDACTED]
3	56–109	[REDACTED]
4	110–141 151–159 210–230 244	[REDACTED]
5	142–144	[REDACTED]
6	145	[REDACTED]

APPENDIX D (continued):

[REDACTED]

	Exhibit No.	[REDACTED]
7	146–150 160–162	[REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]
8	163–209 231–242	[REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]

APPENDIX E:

[REDACTED]

	Exhibit No.	[REDACTED]
1	1-36 243	[REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]
2	37-55	[REDACTED] [REDACTED] [REDACTED]
3	56-141 151-159 210-242 244	[REDACTED] [REDACTED] [REDACTED] [REDACTED]
4	142-145	[REDACTED] [REDACTED] [REDACTED]
5	146-150 160-162	[REDACTED] [REDACTED] [REDACTED]
6	163-209	[REDACTED] [REDACTED] [REDACTED]

APPENDIX F:

[REDACTED]

	Exhibit No.	[REDACTED]
1	56-109	[REDACTED] [REDACTED] [REDACTED]
2	110-139 151-158 210-230 244	[REDACTED] [REDACTED] [REDACTED] [REDACTED]
3	140-141	[REDACTED] [REDACTED]
4	159	[REDACTED] [REDACTED] [REDACTED]
5	163-209	[REDACTED] [REDACTED] [REDACTED]
6	231-242	[REDACTED] [REDACTED]
7	1-55 142-150 160-162 243	<u>No Applicable Provision.</u>

APPENDIX G:

[REDACTED]

	Exhibit No.	[REDACTED]
1	56–109	[REDACTED]
2	110–141 244	[REDACTED]
3	151–158 210–221 231–242	[REDACTED]

APPENDIX G (continued):

[REDACTED]

	Exhibit No.	[REDACTED]
4	159	[REDACTED]
5	163–209	[REDACTED]
6	222–230	[REDACTED]

APPENDIX G (continued):

[REDACTED]

	Exhibit No.	[REDACTED]
7	1-55 142-150 160-162 243	<u>No Applicable Provision.</u> [REDACTED] [REDACTED]

APPENDIX H:

[REDACTED]

	Exhibit No.	Text of Agreement
1	1A-10A 243A	[REDACTED]
2	11A-25A 28A 31A 36A	[REDACTED]

APPENDIX H (continued):

[REDACTED]

	Exhibit No.	Text of Agreement
3	26A–27A 29A–30A 32A–35A	[REDACTED]
4	142A–145A	[REDACTED]

APPENDIX H (continued):

[REDACTED]

	Exhibit No.	Text of Agreement
5	146A–148A	[REDACTED]
6	149A–150A	[REDACTED]

APPENDIX H (continued):

[REDACTED]

	Exhibit No.	Text of Agreement
7	160A–162A	[REDACTED]
8	37–141 151–159 163–242 244	<u>Not Applicable.</u> [REDACTED]

APPENDIX I:

[REDACTED]

	Exhibit No.	[REDACTED]
1	1-36 243	[REDACTED] [REDACTED] [REDACTED] [REDACTED]
2	37-55	[REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]
3	56-141 151-159 163-221 231-242 244	[REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]
4	142-145	[REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]

APPENDIX I (continued):

[REDACTED]

	Exhibit No.	[REDACTED]
5	146–150 160–162	[REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]
6	222–230	[REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]

APPENDIX J:

[REDACTED]

	Exhibit No.	[REDACTED]
1	1-36 142-145 243	[REDACTED]
2	37-55	[REDACTED]
3	56-109	[REDACTED]
4	110-141 151-159 210-230 244	[REDACTED]

APPENDIX J (continued):

[REDACTED]

	Exhibit No.	[REDACTED]
5	146–150 160–162	[REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]
6	163–209	[REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]
7	231–242	[REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]

APPENDIX K:

[REDACTED]

	Exhibit No.	[REDACTED]
1	1-36 142-145 243	[REDACTED]
2	37-109	[REDACTED]

APPENDIX K (continued):

[REDACTED]

	Exhibit No.	[REDACTED]
3	110-141 151-158 160-162 244	[REDACTED]
4	146-150	[REDACTED]

APPENDIX K (continued):

[REDACTED]

	Exhibit No.	[REDACTED]
5	159 163–230	[REDACTED]
6	231–242	[REDACTED]

APPENDIX L:

[REDACTED]

	Exhibit No.	[REDACTED]
1	1-36 146-150 243	[REDACTED] [REDACTED] [REDACTED] [REDACTED]
2	37-145 151-162 210-242 244	[REDACTED] [REDACTED] [REDACTED] [REDACTED]
3	163-209	[REDACTED] [REDACTED] [REDACTED] [REDACTED]

APPENDIX M:

[REDACTED]

	Exhibit No.	[REDACTED]
1	1-36 142-150 154-158 160-162 243	[REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]
2	37-141 151-153 159 163-230 244	[REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]
3	231-242	[REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]

APPENDIX N:

[REDACTED]

	Exhibit No.	[REDACTED]
1	1-36 142-145 243	[REDACTED] [REDACTED] [REDACTED] [REDACTED]
2	37-141 151-159 163-242 244	[REDACTED] [REDACTED] [REDACTED] [REDACTED]
3	146-150	[REDACTED] [REDACTED] [REDACTED] [REDACTED]
4	160-162	[REDACTED] [REDACTED] [REDACTED] [REDACTED]

APPENDIX O:

[REDACTED]

	Exhibit No.	[REDACTED]
1	1-36 243	[REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]
2	37-55	[REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]
3	56-141 151-242 244	[REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]
4	142-150	[REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]

APPENDIX P:

	Exhibit No.	
1	1A-25A 28A 31A 36A 243A	[REDACTED]
2	1A-25A 28A 31A 36A	[REDACTED]
3	1A-25A 28A 31A 36A	[REDACTED]
4	1A-25A 28A 31A 36A	[REDACTED]
5	26A-27A 29A-30A 32A-35A 37-242 244	<u>No applicable provisions.</u>

APPENDIX Q:

[REDACTED]
[REDACTED]

	Exhibit No.	[REDACTED]
1	1A-25A 28A 31A 36A 243A	[REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]
2	26-27 29-30 32-35 37-242 244	<u>No applicable provisions.</u>

APPENDIX R:

[REDACTED]

	Exhibit No.	[REDACTED]
1	1-10 243	[REDACTED]
2	11-36	[REDACTED]
3	37-109	[REDACTED]

APPENDIX R (continued):

[REDACTED]

	Exhibit No.	[REDACTED]
4	110–141 151–159 204–242 244	[REDACTED]
5	142–150 160–162	[REDACTED]
6	163–203	[REDACTED]

APPENDIX S:

[REDACTED]

	Exhibit No.	
1	1-36 243	[REDACTED] [REDACTED] [REDACTED] [REDACTED]
2	37-55	[REDACTED] [REDACTED] [REDACTED] [REDACTED]
3	56-109 110-141 151-159 210-242 244	[REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]
4	142-150 160-162	[REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]

APPENDIX S (continued):

[REDACTED]

	Exhibit No.	
5	163-209	[REDACTED]

APPENDIX T:

[REDACTED]

	Exhibit No.	
1	1-55 142-150 160-162 243	[REDACTED] [REDACTED] [REDACTED] [REDACTED]
2	56-141 151-159 163-242 244	[REDACTED] [REDACTED] [REDACTED] [REDACTED]

APPENDIX U:

[REDACTED]

	Exhibit No.	
1	1-55 142-150 160-162 243	[REDACTED]
2	56-141 151-159 163-221 231-242 244	[REDACTED]
3	222-230	[REDACTED]

APPENDIX V:

[REDACTED]

	Exhibit No.	[REDACTED]
1	1-36 243	[REDACTED] [REDACTED]
2	37-55	[REDACTED] [REDACTED]
3	56-141 151-159 163-242 244	[REDACTED]
4	142-150 160-162	[REDACTED]

APPENDIX W:

[REDACTED]

	Exhibit No.	[REDACTED]
1	1-36 243	[REDACTED] [REDACTED]
2	37-55	[REDACTED] [REDACTED] [REDACTED]
3	56-141 151-159 163-242 244	[REDACTED] [REDACTED]
4	142-150 160-162	[REDACTED] [REDACTED]

APPENDIX X:

[REDACTED]

	Exhibit No.	
1	1-244	<div>[REDACTED]</div>

APPENDIX Y:

[REDACTED]

	Exhibit No.	[REDACTED]
1	1-230 243-244	[REDACTED]
2	231-242	[REDACTED]

APPENDIX Z:

[REDACTED]

	Exhibit No.	[REDACTED]
1	1-55 243	[REDACTED] [REDACTED] [REDACTED] [REDACTED]
2	56-242 244	[REDACTED] [REDACTED] [REDACTED] [REDACTED]

APPENDIX AA:

[REDACTED]

	Exhibit No.	[REDACTED]
1	1-36 243	<div>[REDACTED]</div>
2	37-55	<div>[REDACTED]</div>

APPENDIX AA (continued):

[REDACTED]

	Exhibit No.	[REDACTED]
3	56-109	<div>[REDACTED]</div>
4	110-141 244	<div>[REDACTED]</div>

APPENDIX AA (continued):

[REDACTED]

	Exhibit No.	[REDACTED]
5	142-145	<div>[REDACTED]</div>
6	146-150 160-162	<div>[REDACTED]</div>

APPENDIX AA (continued):

[REDACTED]

	Exhibit No.	[REDACTED]
7	151-159 210-230	<div>[REDACTED]</div>

APPENDIX AA (continued):

[REDACTED]

	Exhibit No.	[REDACTED]
8	163-209	<div>[REDACTED]</div>

APPENDIX AA (continued):

[REDACTED]

	Exhibit No.	[REDACTED]
9	231-242	<div>[REDACTED]</div>

APPENDIX BB:

[REDACTED]

	Exhibit No.	[REDACTED]
1	1-36 142-145 243	[REDACTED] [REDACTED] [REDACTED] [REDACTED]
2	37-109	[REDACTED] [REDACTED] [REDACTED] [REDACTED]
3	110-141 151-159 163-242 244	[REDACTED] [REDACTED] [REDACTED] [REDACTED]
4	146-150 160-162	[REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]

APPENDIX CC:

[REDACTED]

	Exhibit No.	[REDACTED]
1	1-36 243	[REDACTED]
2	37-55	[REDACTED]
3	56-109	[REDACTED]
4	110-141 151-159 210-242 244	[REDACTED]

APPENDIX CC (continued):

[REDACTED]

	Exhibit No.	[REDACTED]
5	163–209	[REDACTED]
6	142–145	[REDACTED]
7	146–150 160–162	[REDACTED]

APPENDIX DD:

[REDACTED]

	Exhibit No.	[REDACTED]
1	1-244	[REDACTED] [REDACTED]